Figure 1-A

| • | | | | | |
|-----------|-------------|-------------|------------|------------|-------------|
| >g2804590 | CCTGCCTGCA | CCCGCT:CAC | CCTGAGCGCC | | |
| >g2804590 | | | | | TGCAGACTGT |
| >2682428 | | CCCGCT: CAC | | | |
| >2682469 | CCTGCCTGCA | CCCGCTTCAC | CCTGAGCGCC | | |
| >3359342 | | | | GGAGGC | TGCAGACTGT |
| >1736231 | | | | | TGCAGACTGT |
| >1734520 | | | | | TGCAGACTGT |
| Consensus | CCTGCCTGCA | CCCGCT: CAC | CCTGAGCGCC | TTGGGGTGGT | TGCAGACTGT |
| >g2804590 | GGAATCCCCA | CTGTGCAG | | | |
| >g2804590 | GGAGCCGGGA | GCCGGCAG | | | |
| >g2804590 | | | | TCTCCACCCC | |
| >2682428 | GGAATCCCCA | CTGTGCAGTA | AGCCCAGATG | TCTCCANNCC | AACGGTAGGA |
| >2682469 | GGAATCCCCA | CTGTGCAGTA | AGCCCAGAGG | TCTCCACCCC | A:CGGGATGA |
| >3359342 | | GCCGGCAGTA | | | |
| >1736231 | | GCCGGCAGTA | | | |
| >1734520 | GGAGCCGGGA | GCCGGCAGTA | AGCCCAGAGG | TCTCCACCCC | A: CGGGAGGA |
| Consensus | GGAGCCGGGA | GCCGGCAGTA | AGCCCAGAGG | TCTCCACCCC | A:CGGGAGGA |
| >g2804590 | AGGCTGAGGC | CAAGACCCCG | GAAGAGATGG | ACCGCGTGAC | CAGATACCCC |
| >2682428 | AGGCTGATGC | CAAGACCCCG | GAAGAGATGG | ANCGCGTGAC | CAGATACCC: |
| >2682469 | AGGCTGAGGC | CAAGACCCCG | GAAGAGATGG | ACCGCGTGAC | CAGATACCCC |
| >3359342 | AGGCTGAGGC | CAAGACCCCG | GAAGAGATGG | ACCGCGTGAC | CAGATACCCC |
| >1736231 | AGGCTGAGGC | CANGNCCCCG | GAAGAGATGG | ACCGCGTGAC | CAGATACCCC |
| >1734520 | AGGCTGAGGC | CAAGACCCCG | GAAGAGATGG | ACCGCGTGAC | CAGATACCCC |
| >2596108 | | CCCCG | GAAGAGATGG | ACCGCGTGAC | CAGATACCCC |
| Consensus | AGGCTGAGGC | CAAGACCCCG | GAAGAGATGG | ACCGCGTGAC | CAGATACCCC |
| >g2804590 | ATCCTGGGCA | TCCCTCAGGC | ACACCGTGG: | CACCGGCCTG | GTGCTGGATG |
| >2682428 | ATCCTGNGCA | TCCCTCAGGC | ACACCGTGG: | CACCGGCCTG | GTGCTGGATG |
| >2682469 | ATCCTGGGCA | TCCCTCAGGC | ACACCGTGGG | CACCGGCCTG | GTGCTNGATG |
| >3359342 | ATCCTGGGCA | TCCCTCAGGC | ACACCGTGG: | CACCGGT | |
| >1736231 | ATCCTGGGC | | | | |
| >1734520 | ATCCTGGGCA | TCCCTCAGGC | ACACCGTGG: | CACCGGCCTG | GTGCTGGATG |
| >2596108 | ATCCTGGGCA | TCCCTCAGGC | ACACCGTGG: | CACCGGCCTG | GTGCTGGATG |
| Consensus | ATCCTGGGCA | TCCCTCAGGC | ACACCGTGG: | CACCGGCCTG | GTGCTGGATG |
| >g2804590 | GAGACACCAG | CTACACATAC | CATCTGGTGT | GCATGGGCCC | CGAGGCCAGC |
| >2682428 | GAGACACCAG | CTACACATAC | CATCTGGTGT | GCATTGGCCC | CGAAGCCAGC |
| >2682469 | GAGACACNAG | TTNCACATAC | CATCTGGTGT | GCATGGGCCC | CGANGC: AGC |
| >1734520 | GAGACACCAG | CTACACATAC | CATCTGGTGT | GCATGGGCCC | CGAGGCCAGC |
| >2596108 | GAGACACCAG | CTACACATAC | CATCTGGTGT | GCATGGGCCC | CGAGGCCAGC |
| >3388863 | | | | | TAGGGCCAGC |
| Consensus | GAGACACCAG | CTACACATAC | CATCTGGTGT | GCATGGGCCC | CGAGGCCAGC |
| >g2804590 | GGCTGGGGCC | AGGATGAGCC | GCAGACATGG | CCCACTGACC | ACAGGGCCCA |
| >2682428 | | ANGATGAGCC | | | |
| >2682469 | - | AGGATGAGCC | | = | NAAGGCCAT |
| >1734520 | GG: TGGGGCC | | | | |
| >2596108 | | | GCAGACATGG | CCCACTGACC | ACAGGGCCCA |
| >3388863 | | | | | ACAGGGCCCA |
| Consensus | | | | | ACAGGGCCCA |
| | | | | | |

Figure 1-B

| >g2804590 | | | | CAGCGTGCAT | |
|--|-------------|-------------|-------------|---------------------|--------------------------|
| >2596108 | | | | CAGCGTGCAT | |
| >3388863 | GCAGGGCGTG | CAGAGGCAGG | GGGTGTCCTA | CAGCGTGCAT | GCCTACACTG |
| Consensus | GCAGGGCGTG | CAGAGGCAGG | GGGTGTCCTA | CAGCGTGCAT | GCCTACACTG |
| | | | | | |
| >g2804590 | GCCAGCCGTC | CCCACGGGGG | CTCCACTCGG | AGAACAGGGA | GGATGAGGGT |
| >2596108 | GCCAGCCGTC | | | | |
| >3388863 | | | | AGAACAGGGA | |
| Consensus | GCCAGCCGTC | CCCACGGGGG | CTCCACTCGG | AGAACAGGGA | GGATGAGGGT |
| • | | | | | |
| >g2804590 | | | | GCCCACCAGG | |
| >3388863 | | | | GCCCACCAGG | |
| Consensus | TGGCAGGTTT | ACCGCCTGGG | CGCCAGGGAT | GCCCACCAGG | GACGTCCAAC |
| >g2804590 | ATCCCCACTC | CCCCAGAGG | ACGGGGAGGA | CAAGGAGATG | AAGACCTACC |
| >3388863 | | | | CAAGGAGATG | |
| <g2322685< td=""><td>moderate</td><td></td><td></td><td>CAAGGAGATG</td><td></td></g2322685<> | moderate | | | CAAGGAGATG | |
| Consensus | ATCCCCACTC | | | CAAGGAGATG | |
| Consensus | AIGGGCACIC | Coccenonad | Accedencers | CILICONOMIC | |
| >g2804590 | GCCTGGATGC | TGGGGACGCT | GACCCCAGGA | GGCTGTGTGA | CCTGGAGCGG |
| >3388863 | | | | GGCTGTGTGA | |
| <g2322685< td=""><td>GCCTGGATGC</td><td>TGGGGACGCT</td><td>GACCCCAGGA</td><td>GGCTGTGTGA</td><td>CCTGGAGCGG</td></g2322685<> | GCCTGGATGC | TGGGGACGCT | GACCCCAGGA | GGCTGTGTGA | CCTGGAGCGG |
| Consensus | GCCTGGATGC | TGGGGACGCT | GACCCCAGGA | GGCTGTGTGA | CCTGGAGCGG |
| • | | | | | |
| >g2804590 | GAGCGCTGGG | CCGTCATCCA | GGGCCAGGCA | GTCAGGAAGA | GCAGCACCGT |
| <g2322685< td=""><td>GAGCGCTGGG</td><td>CCGTCATCCA</td><td>GGGCCAGGCA</td><td>GTCAGGAAGA</td><td>GCAGCACCGT</td></g2322685<> | GAGCGCTGGG | CCGTCATCCA | GGGCCAGGCA | GTCAGGAAGA | GCAGCACCGT |
| Consensus | GAGCGCTGGG | CCGTCATCCA | GGGCCAGGCA | GTCAGGAAGA | GCAGCACCGT |
| | | | | | |
| >g2804590 | | | | AGACCCCAGG | |
| <g2322685< td=""><td></td><td></td><td></td><td>AGACCCCAGG</td><td></td></g2322685<> | | | | AGACCCCAGG | |
| Consensus | GGCCACGCTC | CAGGGCACTC | CTGACCACGG | AGACCCCAGG | ACCCCCGGCC |
| · ~2004500 | CACCTCCCTC | CACCCCCCC | CACCACAACC | TGGTTGACAG | ССАССАСАТТ |
| >g2804590 <g2322685< td=""><td></td><td></td><td></td><td>TGGTTGACAG</td><td></td></g2322685<> | | | | TGGTTGACAG | |
| Consensus | | | | TGGTTGACAG | |
| Consensus | CACCICGGIC | CACOCCCIO | GAGGAGAACG | roorronene | Gangenonii |
| >g2804590 | GACTTCCTGG | CAGCGAGACA | GCAGTTCCTG | AGTCTGGAGC | AGGCGAACAA |
| <g2322685< td=""><td>GACTTCCTGG</td><td>CAGCGAGACA</td><td>GC</td><td></td><td></td></g2322685<> | GACTTCCTGG | CAGCGAGACA | GC | | |
| >3988413 | | | | GGAGC | AGGCGAACAA |
| Consensus | GACTTCCTGG | CAGCGAGACA | GCAGTTCCTG | AGTCTGGAGC | AGGCGAACAA |
| | | | | | |
| >g2804590 | GGGGGCCCCT | CATAGCTCCC | CGGCCAGGGG | GACCCCTGCA | GGCACAACCC |
| >3988413 | GGGGGCCCCT | CATAGCTCCC | CGGCCNGGGG | GACCCCTGCA | GGCACAACCC |
| Consensus | GGGGGCCCCT | CATAGCTCCC | CGGCCAGGGG | GACCCCTGCA | GGCACAACCC |
| | | | | | |
| >g2804590 | | | | | CCTGGCCAAC |
| >3988413 | | | | | CCTGGCCAAC |
| Consensus | CAGGGGCCAG | CCAGGCCCCC | AAGGCCTTCA | ACAAGCCCCA | CCTGGCCAAC |
| | CCCC3 CCTCC | mmcccamca a | | , y y c.c.c.c.m.c.c | י שכאכככאאכא |
| >g2804590 | | | | | TCAGGGAAGA |
| >3988413 | | | | | TCAGGGAAGA TCAGGGAAGA |
| Consensus | GGGCACGTGG | TTCCCATCAP | GCCCCAGGTG | ANGGGGGTGG | 1 CAGGGAAGA |

Figure 1-C

| >g2804590 | GAACAAGGTG | CGTGCTGTGC | CCACCTGGGC | CAGTGTCCAA | GTTGTGGATG |
|------------|------------|-------------|-------------|--------------------|--------------------|
| >3988413 | | | CCACCTGGGC | | |
| Consensus | | | CCACCTGGGC | | |
| -, | | | | | |
| >g2804590 | ACCCTGGCTC | CTTGGCCTCA | GTGGAGTCCC | CGGGGACCCC | CAAGGAGACG |
| >3988413 | ACCCTGGCTC | CTTGGCCTCA | GTGGAGTCCC | CGGGGACCCC | CAAGGAGACG |
| Consensus | | | GTGGAGTCCC | | |
| | | | | | |
| >g2804590 | CCCATCGAGC | GGGAGATCCG | TCTGGCTCAG | ${\tt GAGCGTGAGG}$ | CAGACCTGCG |
| >3988413 | CCCATCGAGC | GGGAGATCCG | TCTGGCTCAG | | |
| Consensus | CCCATCGAGC | GGGAGATCCG | TCTGGCTCAG | GAGCGTGAGG | CAGACCTGCG |
| • | | | | | |
| >g2804590 | | | AGGCAACCGA | | |
| Consensus | AGAGCAGAGG | GGGCTTCGGC | AGGCAACCGA | CCACCAGGAG | CTGGTGGAAA |
| | | · | | | |
| >g2804590 | | | ACCAAGCTGA | | |
| Consensus | TCCCCACCAG | GCCGCTGCTG | ACCAAGCTGA | GCCTGATCAC | AGCCCCACGG |
| 0004500 | | aaaaaaaama | COMOMA COMO | 03.0000 . 03.0 | 3 m 2 Cm 3 C 3 C C |
| >g2804590 | CGGGAGAGAG | GGCGCCCGTC | CCTCTACGTG | | |
| >3615515 | 0000101010 | | · · | CAGCGGNGAC | |
| Consensus | CGGGAGAGAG | GGCGCCCGTC | CCTCTACGTG | CAGCGGNGAC | ATAGTACAGG |
| >g2804590 | ACACACACOC | TCACCAACAC | CACCGGCGGG | A GGGCCTGCA | COTTOGGCCCG |
| >3615515 | | | CACCGGCGGG | | |
| Consensus | | | CACCGGCGGG | | • |
| Consensus | ломсисносо | Tonogranone | CACCOGCOCO | 110000010011 | 0010000000 |
| >g2804590 | GCGTCCACAC | CCGACTGGGT | CTCGGAGGGT | CCCCAGCCCG | GACTCCGGAG |
| >3615515 | GCGTCCACAC | CCGACTGGGT | CTCGGAGGGT | CCCCAGCCCG | GACTCCGGAG |
| Consensus | GCGTCCACAC | CCGACTGGGT | CTCGGAGGGT | CCCCAGCCCG | GACTCCGGAG |
| | | | | | |
| >g2804590 | AGCCCTCAGC | TCAGATTCCA | TCCTCAGCCC | GGCCCCAGAT | GCCCGTGCGG |
| >3615515 | | | TCCTCAGCCC | | |
| Consensus | AGCCCTCAGC | TCAGATTCCA | TCCTCAGCCC | GGCCCCAGAT | GCCCGTGCGG |
| | | | | | • |
| >g2804590 | | | AGGAAGGTGA | | |
| >3615515 | CCGACCCAGC | TCCAGAAGTG | AGGAAGGTGA | ACCGCATCCC | |
| >2055371 | | | | | CTGATGCC |
| >2055371IH | | | | | TGATGCC |
| Consensus | CCGACCCAGC | TCCAGAAGTG | AGGAAGGTGA | ACCGCATCCC | ACCTGATGCC |
| >g2804590 | መአርሮአሮሮሮሞ | እሮርሞርእሮርርር | CCCCACCCCC | ር አርርጥአር አአጥ | TCTCAGCCTT |
| >3615515 | | | | | TCTCAGC: TT |
| >2055371 | | | | | TCTCAGCCTT |
| >2055371 | | | | | TCTCAGCCTT |
| | | | | | TCTCAGCCTT |
| Consensus | TACCAGCCGT | ACCIGAGCCC | COGGACCCCC | CAGCIAGAAI | TCTCAGCCTT |
| >g2804590 | CGGAGCATTC | GGCAAGCCCA | GCAGTCTCTC | CACAGCGGAG | G:CCAAGGCT |
| >3615515 | | GGCAAGCCCA | | | |
| >2055371 | | | | NACAGCGGAG | GANCAAGGCT |
| >2055371IH | | | | | G:CCAAGGCT |
| >1431231 | | | | | G:CCAAGGCT |
| Consensus | CGGAGCATTC | GGCAAGCCCA | GCAGTCTCTC | CACAGCGGAG | G:CCAAGGCT |
| | | * | | | |

Figure 1-D

| 2004500 | COOL CHURCH C | CARACCCCAC | CAMCHOCOCC | AGGCATCTCT | CACA A MOCOCO |
|------------------------|---------------|------------|--------------------|---------------|----------------|
| >g2804590 | | | | AGGCATCTCT | |
| >2055371 | | | | AGGCATCTCT | |
| >2055371IH | | | - | | |
| >1431231 | | | | AGGCATCTCT | |
| Consensus | GCGACTTCAC | CAAAGGCCAC | GATGTCCCCG | AGGCATCTCT | CAGAATCCTC |
| >g2804590 | TGGAAAACCC | CTGAGCACAA | AGCAAGAGGC | ATCGAAGCCC | CCTCGGGGAT |
| >2055371 | TGGAAAACCC | CTGAGCACAA | AGCAAGAGGC | ATCGAAGCCC | CCTCGGGGAT |
| >2055371IH | TGGAAAACCC | CTGAGCACAA | AGCAAGAGGC | ATCGAAGCCC | CCTCGGGGAT |
| >1431231 | TGGAAAACCC | CTGAGCACAA | AGCAAGAGGC | ATCGAAGCCC | CCTCGGGGAT |
| >3253860 | | • | · | | CGGGGAT |
| Consensus | TGGAAAACCC | CTGAGCACAA | AGCAAGAGGC | ATCGAAGCCC | CCTCGGGGAT |
| >g2804590 | GCCCGCAAGC | CAACAGGGGT | GTCGTGCGGT | GGGAGTACTT | CCGCCTGCGT |
| >2055371 | GCCCGCAAGC | | | | |
| >2055371 >2055371IH | | | GTCGTGCGGT | GGGAGTACTT | СССССТСССТ |
| >1431231 | | | | GGGAGTACTT | |
| >3253860 | | | | GGGAGTACTT | |
| Consensus | | | | GGGAGTACTT | |
| Consensus | GCCGCAAGC | CAACAGGGGI | GICGIGCGGI | GGGAGTACTT | CCGCCTGCGT |
| >g2804590 | CCTCTGCGGT | TCAGGGCCCC | AGACGAGCCC | CAGCAGGCCC | AAGTCCCCCA |
| >2055371IH | CCTCTGCGGT | TCAGGGCCCC | AGACGAGCCC | CAGCAGGCCC | AAGTCCCCCA |
| >1431231 | CCTCTGCGGT | TCAGGGCCCC | AGACGAGCCC | CA | |
| >3253860 | CCTCTGCGGT | TCAGGGCCCC | AGACGANCCC | CAGCAGGCCC | AAGTCCCCCA |
| Consensus | CCTCTGCGGT | TCAGGGCCCC | AGACGAGCCC | CAGCAGGCCC | AAGTCCCCCA |
| | | | | | |
| >g2804590 | TGTCTGGGGC | TGGGAGGTGG | CTGGGGCCCC | TGCACTGAGG | CTGCAGAAGT |
| >2055371IH | TGTCTGGGGC | TGGGAGGTGG | CTGGGGCCCC | TGCACTGAGG | CTGCAGAAGT |
| >3253860 | | | | TGCACTGAGG | |
| >1753756 | | GGAGGTGG | CTGGGGCCCC | NGCACTGAGG | CTGCAGAAGT |
| Consensus | TGTCTGGGGC | TGGGAGGTGG | CTGGGGCCCC | TGCACTGAGG | CTGCAGAAGT |
| | | | | | |
| >g2804590 | | | | GGGAGAGTGT | |
| >2055371IH | CCCAGTCATC | | | GGGAGAGTGT | |
| >3253860 | CCCAGTCATC | | | GGGAGAGTGT | - |
| >1753756 | CCCAGTCATC | | | GGGAGAGTGT | |
| Consensus | CCCAGTCATC | TGATCTGCTG | GAAAGGGAGA | GGGAGAGTGT | CCTGCGCCGG |
| >g2804590 | GAGCAAGAGG | TGGCAGAGGA | GCGGAGAAAT | GCTCTCTTCC | CAGAGGTCTT |
| >2055371IH | GAGCAAGAGG | TGGCAGAGGA | GCGGAGAAAT | GCTCTCTTCC | CAGAGGTCTT |
| >3253860 | GAGCAAGAGG | TGGCAGAGGA | GCGGAGAAAT | GCTCTCTTCC | CAGAGGTCTT |
| >1753756 | GAGCAAGAGG | TGGCAGAGGA | GCGGAGAAAT | GCTCTCTTCC | CAGAGGTCTT |
| Consensus | GAGCAAGAGG | TGGCAGAGGA | GCGGAGAAAT | GCTCTCTTCC | CAGAGGTCTT |
| >g2804590 | СТССССААСС | ССАСАТСАСА | ACTCTGACCA | GAACTCCACG | AGCTCCTCCC |
| >2055371IH | | | | GAACTCCAGG | |
| >3253860 | C | COLLONION | cronccn | U.H.C.I.CCAGG | |
| >1753756 | | ССАСАТСАСА | ል ርጥርጥርልርርል | GAACTCCAGG | AGCTCCTCCC |
| Consensus | | | | | AGCTCCTCCC |
| Consensus | CICCCAACG | CCHONIUNUA | "CICIOUCCH | ONACI CCAGG | AGC I CC I CCC |

Figure 1-E

| - ~2004E00 | AGGCATCCGG | | | | |
|-------------------------|------------|---------------|-------------|------------|-------------|
| >g2804590 >g2804590 | | CAMCACCCC | አርመመአርጥርርር | TGTCTGAGTC | ጥርርርጥጥርጥጥር |
| >g2804390 >2055371IH | | | | TGTCTGAGTC | |
| = | | | | TGTCTGAGTC | |
| >1753756 | AGGCATCCGG | CATCACGGGC | AGTTA: TCGG | | |
| >1887713 | | | | _ | TCCCTTCTTC |
| Consensus | AGGCATCCGG | CATCACGGGC | AGTTACTCGG | TGTCTGAGTC | Tecerrerre |
| >g2804590 | AGCCCCATCC | ACCTACACTC | AAACGTGGCG | TGGACAGTGG | AAGATCCAGT |
| >2055371IH | AGCCCCATCC | ACCTACACTC | AAACGTGGCG | TGGACAGTGG | AAGATCCAGT |
| >1887713 | AGCCCCATCC | ACCTACACTC | AAACGTGGCG | TGGACAGTGG | AAGATCCAGT |
| Consensus | | | | TGGACAGTGG | |
| | | | | | |
| >g2804590 · | GGACAGTGCT | CCTCCCGGGC | AGAGAAAGAA | GGAGCAATGG | |
| >g2804590 | | | | G | TACGCTGGCA |
| >2055371IH | GGACAGTGCT | CCTCCCGGGC | AGAGAAAGAA | GGAGCAATGG | TACGCTGGCA |
| >1887713 | GGACAGTGCT | CCTCCCGGGC | AGAGAAAGAA | GGAGCAATGG | TACGCTGGCA |
| Consensus | GGACAGTGCT | CCTCCCGGGC | AGAGAAAGAA | GGAGCAATGG | TACGCTGGCA |
| | | | | | |
| >g2804590 | TCAACCCCTC | GGACGGTATC | AACTCAGAGG | Т | |
| >g2804590 | | | AGG | TCCTGGAAGC | CATACGGGTG |
| >2055371IH | TCAACCCCTC | GGACGGTATC | AACTCAGAGG | TCCTGGAAGC | CATACGGGTG |
| >1887713 | TCAACCCCTC | GGACGGTATC | AACTCAGAGG | TCCTGGAAGC | CATACGGGTG |
| Consensus | TCAACCCCTC | GGACGGTATC | AACTCAGAGG | TCCTGGAAGC | CATACGGGTG |
| | | | • | | |
| >g2804590 | ACCCGTCACA | AGAACGCCAT | GGCAGAGCGC | TGGGAATCCC | GCATCTACGC |
| >2055371IH | ACCCGTCACA | AGAACGCCAT | GGCAGAGCGC | TGGGAATCCC | GCATCTACGC |
| >1887713 | ACCCGTCACA | AGAACGCCAT | GGCAGAGCGC | TGGGAATCCC | GCATCTACGC |
| >1803052 | | | С | TGGGAATCCC | GCATCTACGC |
| Consensus | ACCCGTCACA | AGAACGCCAT | | TGGGAATCCC | |
| 000 | | | | | |
| >g2804590 | CAGTGAGGAG | GATGACTGAG | CCTCGGGATG | GGGCGCCCAC | CCCCTGCCCT |
| >2055371IH | CAGTGAGGAG | GATGACTGAG | CCTCGGGATG | GGGCGCCCAC | CCCCTGCCCT |
| >1887713 | CAGTGAGGAG | GATGACTGAG | CCTCGGGATG | GGGCGCCCAC | CCCCTGCCCT |
| >1803052 | CAGTGAGGAG | GATGACTGAG | CCTCGGGATG | GGGCNCCCAC | CCCCTGCCCT |
| Consensus | CAGTGAGGAG | GATGACTGAG | CCTCGGGATG | GGGCGCCCAC | CCCCTGCCCT |
| | | | | | |
| >g2804590 | GCCCTGACCC | TCGTGGGAAC | TGCCAAGACC | ATCGCCAAGC | CCCCACCCTA |
| >2055371IH | GCCCTGACCC | TCGTGGGAAC | TGCCAAGACC | ATCGCCAAGC | CCCCACCCTA |
| >1887713 | GCCCTGACCC | TCGTGG | | | |
| >1803052 | GCCCTGACCC | TCGTGGGAAC | TGCCAAGACC | ATCGCCAAGC | CCCCACCCTA |
| Consensus | GCCCTGACCC | TCGTGGGAAC | TGCCAAGACC | ATCGCCAAGC | CCCCACCCTA |
| | | • | • | | |
| >g2804590 | | | | ACCACAGCTC | |
| >2055371IH | | | | ACCACAGCTC | |
| >1803052 | | | | ACCACAGCTC | |
| Consensus | GGAAATGGGT | CCTAGGTCCA | GGATCCAAGA | ACCACAGCTC | ATCTGCCAAC |
| | | macaaa a a == | madal amazz | COOMMEMBER | mmmo.commr- |
| >g2804590 | | | | GGGTTTTTCG | |
| >2055371IH | | | | GGGTTTTTCG | |
| >1803052 | | - | | | TTTCCGTTTC |
| Consensus | AATCCCACCA | TGGGCACATT | TGGGACTGTT | GGGTTTTTCG | TTTCCGTTTC |

Figure 1-F

| | | | | | • |
|------------|---------------|--------------|--------------|---------------|----------------|
| >g2804590 | TATCTTCCTT | TAGAAATGTT | TCTGCCTTTG | GGGTCTAAAG | CTTTTGGGGA |
| >2055371IH | TATCTTCCTT | | | | |
| >1803052 | TATCTTCCTT | TAGAAATGTT | TCTGCCTTTG | | |
| >889029 | | | | - | CTTTTGGGGA |
| Consensus | TATCTTCCTT | TAGAAATGTT | TCTGCCTTTG | GGGTCTAAAG | CTTTTGGGGA |
| | | | | | |
| >g2804590 | | | TTCTTTCTGC | | |
| >2055371IH | | | TTCTTTCTGC | TTCTAAGACT | TIGCCAAATG |
| >1803052 | TGAAATGGGA | | | mmcm1 1 C1 CM | mmocoo a a amo |
| >889029 | | | TTCTTTCTGC | | TTGCCAAATG |
| Consensus | TGAAATGGGA | CCCCTGCTGA | TTCTTTCTGC | TTCTAAGACT | TTGCCAAATG |
| 0004500 | occord comen | ***** | GAGACCCGCT | CCTCCACTTT | САССТСТААТ |
| >g2804590 | CCCTGGGTCT | AAGAAAGAAA | GAGACCCGCT | CCTCCACTTT | CAGGTGTAAT |
| >2055371IH | | | GAGACCCGCT | | |
| >889029 | CCCTGGGTCT | | GAGACCCGCT | | |
| >2620906 | | | GAGACCCGCT | | |
| Consensus | CCCTGGGTCT | AAGAAAGAAA | GAGACCCGCT | CCTCCACTT | CAGGIGIAAI |
| >g2804590 | ጥጥርርጥጥርርርር | тастстсасс | GCAGAGGGAC | CGGTCAAAGA | GGGTGGCACA |
| >2055371IH | TTGCTTCCGC | | GCAGAGGGAC | | |
| >889029 | TTGCTTCCGC | | GCAGAGGGAC | | |
| >2620906 | TTGCTTCCGC | | GCAGAGGGAC | | |
| | TTGCTTCCGC | | GCAGAGGGAC | | |
| Consensus | 1160110000 | moreronee | 0000000 | 3331312131 | |
| >g2804590 | GATCGCAGCA | CCTTGAGGGG | CTGCGGGTCT | GAGGGAGGAG | ACACTCAGCT |
| >2055371IH | | | CTGCGGGTCT | | |
| >889029 | | | CTGCGGGTCT | | |
| >2620906 | | | | | ACACTCAGCT |
| Consensus | | | CTGCGGGTCT | | |
| | | | | | |
| >g2804590 | | | | | CCCTTTCCAA |
| >2055371IH | | | | | CCCTTTCCAA |
| >889029 | | | | | CCCTTTCCAA |
| >2620906 | | | | | CCCTTTCCAA |
| Consensus | CCTCCCTCTG | AGAAGTCCCA | AGCTGAGAGG | GGAGACCTGC | CCCTTTCCAA |
| | | | | | 001000000 |
| >g2804590 | | | | | CCAGTGCTGG |
| >2055371IH | | | | | CCAGTGCTGG |
| >889029 | | | | | CCAGTGCTGG |
| >2620906 | | | | | CCAGTGCTGG |
| Consensus | CCCTGGGAAA | CCATCCAGTO | TGAGGGAGGA | GGCCAAACTC | CCAGTGCTGG |
| 0004500 | occomo como m | | \ | · | CCAGCCACAC |
| >g2804590 | | | | | CCAGCCACAC |
| >2055371IH | | | AACCCIICAC | . CIIGGIGCAC | . CCAGCCACAC |
| >889029 | GGGTCCCTGT | | 1.1.CCCCTTTC | | |
| >2620906 | | GCAGCCCTC | | | |
| >1754901 | | | | | CCAGCCACAC |
| Consensus | GGGTCCCTGT | GCAGCCCTC | A AACCCTTCAC | CTTGGTGCAC | CCAGCCACAC |
| >~2004E00 | CTCCTCCACA | . CAAACCTCTC | ግ ልሮልሞሮርልሞልር | GATCCCATCA | GGATGGTCCC |
| >g2804590 | | | | | GGATGGTCCC |
| >2055371IH | | | | | GGATGGTCCC |
| >1754901 | | | | | GGATGGTCCC |
| Consensus | CIGGIGGACE | CAAAGCICIC | LACATOMIAC | , UNICCOMIGN | |

Reagents and Methods Useful for Detecting Diseases of the Gastrointestinal Tract 6065.US.D3 P.A. Billing-Medel, et al.

Figure 1-G

| >g2804590 >2055371IH >1754901 Consensus | CTTCACCTGG CTTCACCTGG | GAGAAAAGTG GAGAAAAGTG GAGAAAAGTG GAGAAAAGTG | ACCCAGTTTA ACCCAGTTTA | GGAGCTGGAG GGAGCTGGAG | GGGGGTCTTT GGGGGTCTTT |
|--|--------------------------|--|--------------------------|--------------------------|--------------------------|
| >g2804590 >20553711H >1754901 Consensus | GTCCCCCACC GTCCCCCACC | CCCAAACTGC CCCAAACTGC CCCAAACTGC | CCTGAAATAA CCTGAAATAA | ACCTGGAGTG ACCTGGAGTG | AGCTGCCCA AGCTGCC |

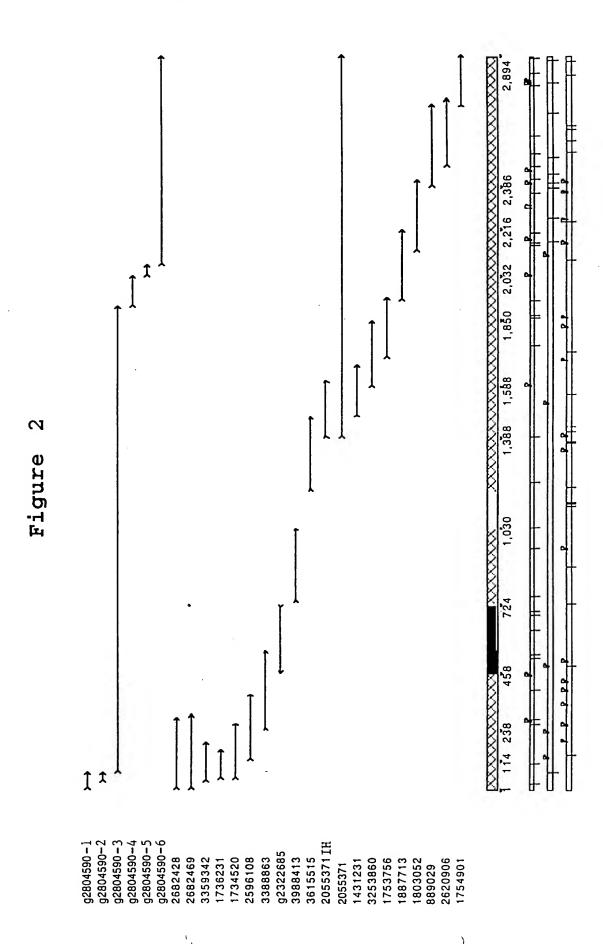
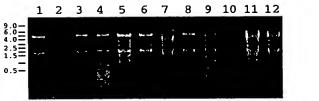
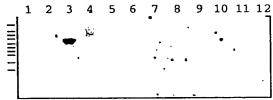
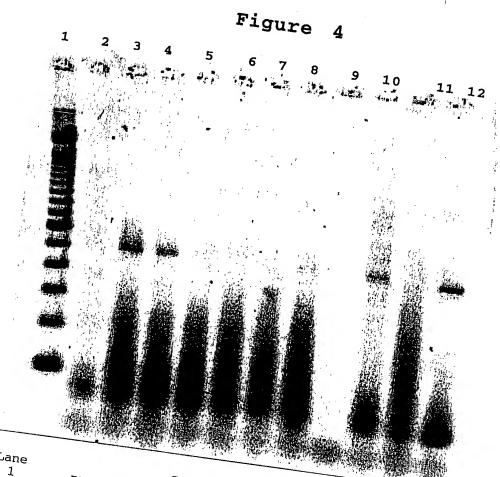


Figure 3





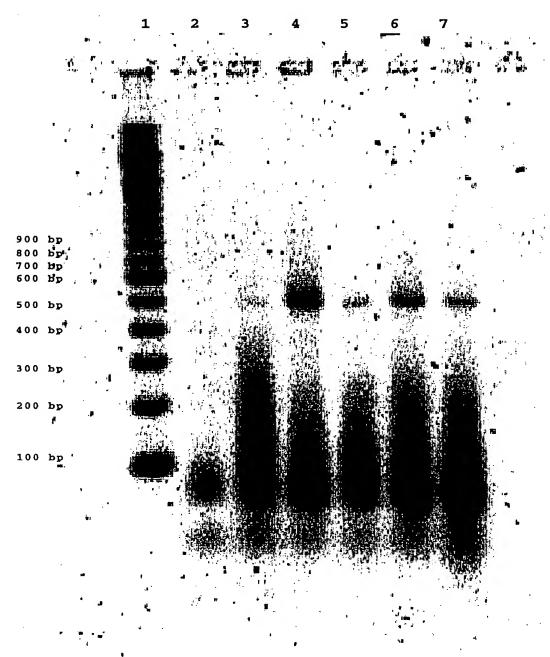
| Lane | Tissue |
|------|----------|
| 1 | Bladder |
| 2 | Breast |
| 3 | Colon |
| 4 | Kidney |
| 5 | Liver |
| 6 | Lung |
| 7 | Muscle |
| 8 | Ovary |
| 9 | Placenta |
| 10 | Prostate |
| 11 | Spleen |
| 12 | Testis |



| | The state of the s |
|---|--|
| Lane | C. T. T. |
| 1 2 3 4 5 6 7 8 9 10 11 12 | Contents DNA Molecular Weight Marker Placental DNA control normal colon cancer colon cancer breast cancer breast BPH prostate cancer prostate BPH prostate normal lung normal lung cancer lung |

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P.A. Billing-Medel, et al.

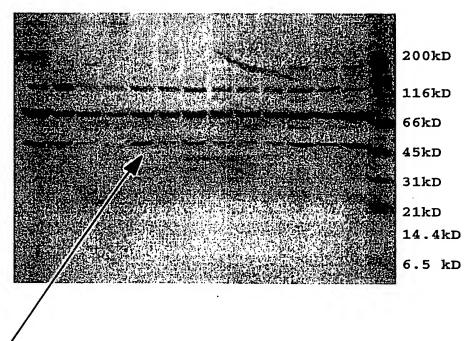
Figure 5



| Lane | Contents |
|------|--------------------------------------|
| 1 | DNA Molecular Weight Marker (100 bp) |
| | placental DNA control |
| 3 | normal colon |
| 4 | cancer colon |
| 5 | cancer colon |
| 6 | normal colon |
| 7 | cancer colon |

Figure 6

1 2 3 4 5 6 ... 7 8 9 10 11 12 13 14



| Lane | 1 | Endometrial cancer |
|------|----|--------------------|
| Lane | 2 | Breast cancer |
| Lane | 3 | Normal lung |
| Lane | 4 | BPH prostate |
| Lane | 5 | Ovarian cancer |
| Lane | 6 | Normal bladder |
| Lane | 7 | Bladder cancer |
| Lane | 8 | Normal colon |
| Lane | 9 | Normal colon |
| Lane | 10 | Normal colon |
| Lane | 11 | Colon cancer |
| Lane | 12 | Colon cancer |
| Lane | 13 | Colon cancer |
| Lane | 11 | Markers |